

CLAIMS:

1. A light source having a planar main surface capable of emitting a white light which comprises a blue LED, an optical guide plate having a planar main surface and an edge face getting injection of the light from said blue LED, and an coating material of transparent resin or glass containing fluorescent materials positioned between said blue LED and said optical guide plate, whereby the fluorescent materials can be excited by absorption of a part of the blue light from the blue LED to emit fluorescence light and the fluorescence light can be mixed with a remaining part of the blue light to make a white light in said optical guide plate.

2. A light source having a planar main surface of emitting a white light according to claim 1, wherein the coating material contains a fluorescent material capable of emitting a green fluorescence light and a fluorescent material capable of emitting a red fluorescence light.

3. A light source having a planar main surface of emitting a white light according to claim 1, wherein the coating material contains a fluorescent material capable of emitting a yellow fluorescence light.

4. A light source having a planar main surface of emitting a white light according to claim 1, wherein the coating material contains an inorganic fluorescent material.

5. A light source having a planar main surface of emitting a white light according to claim 1, wherein the transparent resin is selected from the group consisting of epoxy resin, urea resin and silicone.
6. A light source according to claim 1, wherein the light source is a back light source.
7. A light source according to claim 2, wherein the light source is a backlight source.
8. A light source according to claim 3, wherein the light source is a backlight source.
9. A light source according to claim 4, wherein the light source is a backlight source.
10. A light source according to claim 5, wherein the light source is a backlight source.
11. A liquid crystal display device arranged on a backlight source according to claim 6.
12. A light source having a planar main surface of emitting a white light according to claim 1, wherein the fluorescent material is a yellow body color which fluorescence light is complementary color relation with the light emitting from said blue LED.

13. A light source having a planar main surface of emitting a white light according to claim 1, wherein the fluorescent material comprises at least two different kinds of fluorescent materials.

14. A light source having a planar main surface of emitting a white light according to claim 13, wherein a first one of the fluorescent materials is capable of emitting a green fluorescence light and a second one of the fluorescent materials is capable of emitting a red fluorescence light.

15. A light source having a planar main surface of emitting a white light according to claim 1, wherein a dispersive sheet is arranged on said optical guide plate.